

## **REMARKS**

Claims 1, 3-6, and 8-14 are pending in the present application. Claims 1, 11, and 12 are amended. Claims 2 and 7 were previously canceled in a correspondence filed on December 21, 2004. Reconsideration of the claims is respectfully requested.

### **I. Telephone Interview with Examiner Vo on July 26, 2005**

Applicants thank Examiner Vo for the courtesy extended to applicants' representative during the July 26, 2005 telephone interview. During the interview, the examiner and applicants' representative discussed the after final amendment filed on July 15, 2005 and the cited prior art.

### **II. Amendments**

Applicants have amended claims 1, 11, and 12 to further clarify the voicedness of the fundamental frequency estimates that are higher or lower than the threshold value. The limitation of "wherein the voicedness of the fundamental frequency estimates lower than the threshold value equals no voice, and wherein the voicedness of the fundamental frequency estimates higher than the threshold value equals voice" does not constitute new matter, as it is supported by applicants' specification. For example, the specification on page 16, line 12 – page 17, line 6, reads as follows:

Figure 4A shows a plot of F0 (in units of Hertz) over time (in units of milliseconds). The sampling rate is 10 milliseconds and thus the time distances between the plotted data is also 10 milliseconds so far as they are not interrupted by voiceless sections. Near its center, between 34000 and 35000 milliseconds, the plot comprises such a voiceless section that, in the underlying audio streams, separates two sentences. At the bottom of the diagram, an index function comprising values 1 (= ON) and 0 (= OFF) is depicted which is ON for voiced sections and OFF for voiceless sections of the audios stream.

Also, see Figure 4A below:

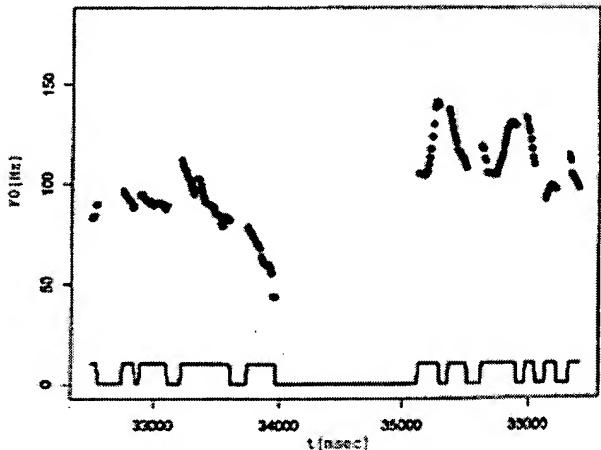


FIG. 4A

Applicants respectfully submit that the proposed amendments further differentiate the present invention for the Shriberg and Yeldener references, which the examiner cited against the application in the office action. Applicants agree with the examiner that Shriberg does not teach or suggest detecting the changes of the fundamental frequency includes providing a threshold value for estimates of the fundamental frequency's voicedness and determining whether the voicedness of the fundamental frequency estimates are higher or lower than the threshold value as recited in independent claim 1. Final Office Action, dated April 28, 2005, Page 4.

The examiner cites Yeldener as teaching "the step of detecting the changes of the fundamental frequency includes providing a threshold value for estimates of the fundamental frequency's voicedness and determining whether the voicedness of the fundamental frequency estimates are higher or lower than the threshold value (col. 15, In. 1 to col. 16, In. 14 and/or col. 14, In. 4-55, the goal is to use 0 and 1 to represent for unvoiced and voice portions, respectively)." Final Office Action, page 4. However, Yeldener teaches that the low frequency portion of the signal spectrum contains a predominantly voiced signal, while the high frequency portion of the spectrum contains predominantly the unvoiced portion of the speech signal. Yeldener, column 4, lines 34-37. In other words, in the Yeldener reference, low frequency equals voice, while high frequency equals no voice.

In contrast, as amended, independent claim 1 of the present invention recites that the voicedness of the fundamental frequency estimates lower than the threshold value

equals no voice and the voicedness of the fundamental frequency estimates higher than the threshold value equals voice. In other words, low frequency equals no voice, while high frequency equals voice as recited in claim 1.

Therefore, because neither Shriberg nor Yeldener teach or suggest that the voicedness of the fundamental frequency estimates lower than the threshold value equals no voice and the voicedness of the fundamental frequency estimates higher than the threshold value equals voice as recited in claim 1, the combination of Shriberg and Yeldener cannot teach or suggest the above recited claim 1 limitation.

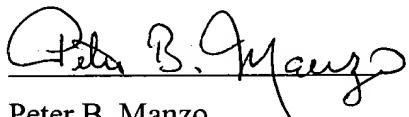
### III. Conclusion

It is respectfully urged that the subject application is patentable over the cited references and is now in condition for allowance.

The examiner is invited to call the undersigned at the below-listed telephone number if in the opinion of the examiner such a telephone conference would expedite or aid the prosecution and examination of this application.

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Respectfully submitted,



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